

from the base, the core and housing having substantially the same flux carrying capacity.

7. In a telephone receiver, a cup-shaped metal coil housing having a core extending from the base, the core and the base and upright portion of the housing having substantially the same flux carrying capacity.

8. In a telephone receiver, a cup-shaped metal housing for the receiver coil, said housing being a permanent magnet with one pole adjacent the center of the base and the opposite pole at the open end of the housing, the base of the housing being of decreasing thickness from the central portion outward.

9. In a telephone receiver, a cup-shaped metal housing for the receiver coil, said housing being a permanent magnet with one pole adjacent the center of the base and the opposite pole at the open end of the housing, the flux carrying capacity of the housing from one pole to the other being substantially uniform.

10. A telephone receiver comprising a coil, a metal housing containing the coil and a vibratory diaphragm opposite the coil, said housing being in the form of a permanent magnet and having a base portion which decreases in thickness from the central portion toward the periphery.

11. A telephone receiver comprising a coil having a core, a cup-shaped housing in the form of a permanent magnet receiving the coil and a vibratory diaphragm opposite the coil and core, the base of the housing being thickest adjacent the center and decreasing in thickness toward the periphery, and the upright wall of the housing having substantially the thickness of the peripheral portion of the base.

12. A telephone receiver comprising a coil having a core, a metal housing in the form of a permanent magnet receiving the same and a vibratory diaphragm at the end of the housing opposite the coil and core, the housing having a base portion at one end of the coil and a portion extending up about the side of the coil, the area of annular sections of the base portion at different distances from the center being substantially the same as the cross-sectional area of the upstanding portion.

13. In a telephone receiver, a metal housing having a base with an upstanding core and having an outer wall, a coil within the housing and a diaphragm at the open end of the housing, the housing and core being formed of permanent magnet steel, and said core base and outer wall having substantially uniform flux carrying capacity.

14. A vibratory diaphragm for a telephone receiver having substantially the same flux carrying capacity adjacent its periphery as in the region of the center.

15. A vibratory diaphragm for a telephone receiver formed so that annular sections cut on different radii are of substantially the same cross sectional area.

16. A telephone receiver comprising a cup-like housing containing a coil and a core, and a flexible metal diaphragm closing the end of the cup, the diaphragm having substantially the same magnetic flux carrying capacity from the central part opposite the core to the peripheral part adjacent the edge of the housing.

In testimony whereof, I hereunto affix my signature.

JOSEPH A. WILLIAMS.